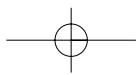
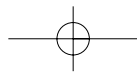


Recon- struction Solidarity: The Thao Tribe

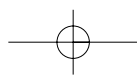


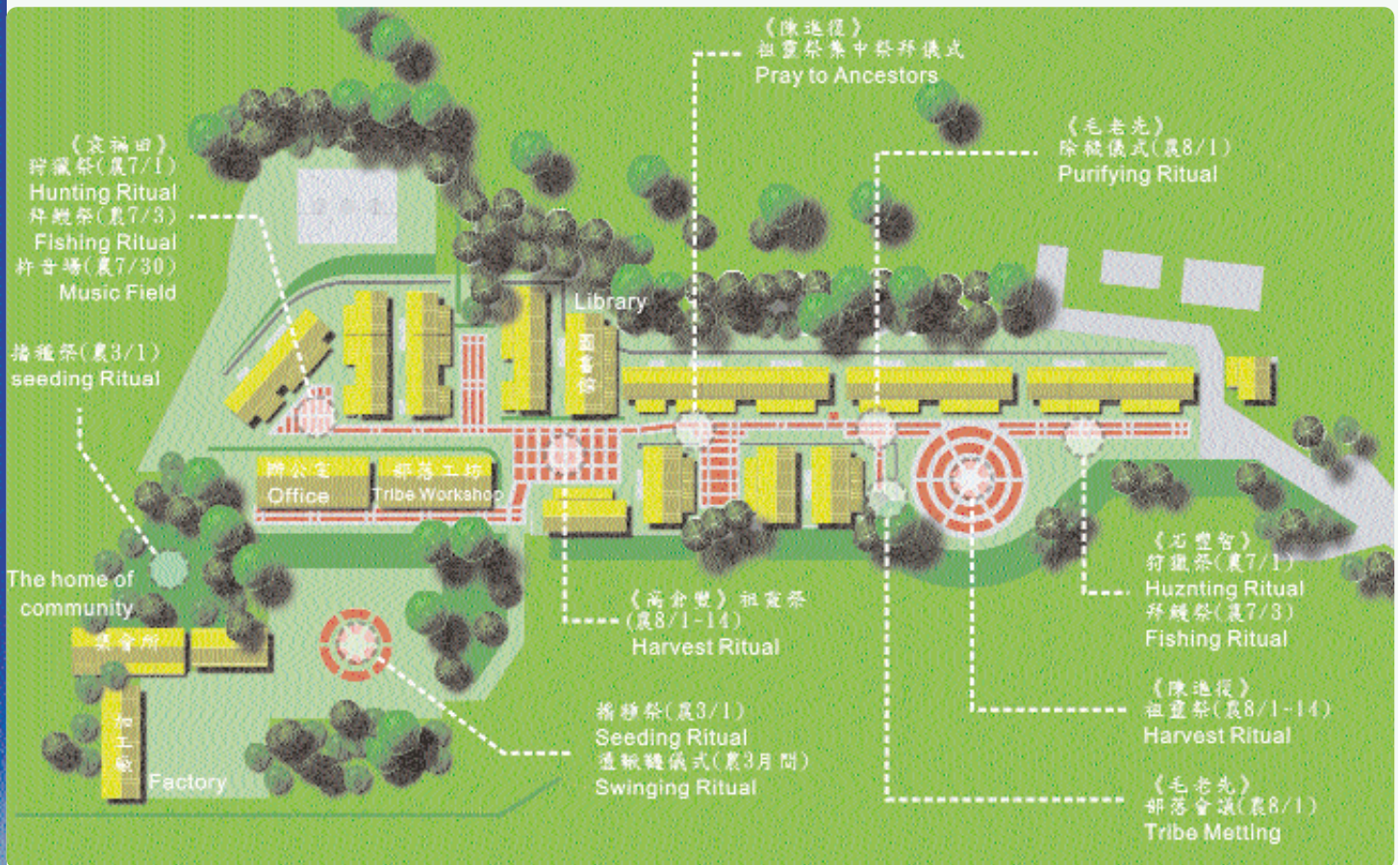
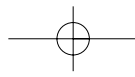


Like many grass-roots makeshift responses to the urban condition in Asia, the low-cost self-build housing solution that Ying Chun Hsieh has created for the Thao tribe in central Taiwan represents a local resistance or ambivalence to globalism. As **Nicholas Boyarsky** explains, this is a position that has not gone unnoticed by those with a capital interest in construction in the area, who have felt that Hsieh is cutting them out of a lucrative market. Hsieh's personal safety has been under threat on several occasions.

Opposite

The Thao tribe has the smallest population of all the aboriginal tribes in Taiwan: 281. Despite its small size it has retained its own unique customs, culture, language and ancestral beliefs and rituals. Most of the tribe's members live in Brawbaw on the banks of the Sun Moon Lake in central Taiwan. The massive earthquake that shook Taiwan in September 1999 damaged or destroyed 80 per cent of the Thao tribe's houses.





Ying Chun Hsieh heads a group of young architects in the 921 Disaster Area Housing Reconstruction Service Group who live and work at Sun Moon Lake, Taiwan. He is currently developing modular housing elements that can be used for putting up a house for a cost of between NT\$220,000 and NT\$900,000 – about half conventional construction costs.

Hsieh's concept is based on the social role that architecture can play. One of the most important aspects of his project is the simplification of the construction. 'Complex construction methods require the use of skilled workers imported from outside. By simplifying construction, the aborigines can build the houses themselves.' The implications of this go far beyond DIY. 'It is really about the exchange of labour. By bringing in friends and family, working weekends and so forth, the cost of the house can be further reduced.'

Working from his camp in the Tehua Community, Hsieh has set up a simple factory where the modular elements of the buildings are made. Most of the complex design work has already been done, and components simply have to be bolted together. Provision is even made for the hanging of scaffolding, to increase safety for the workers, many of whom are drawn from the ranks of the unemployed in the area. With Hsieh's modular elements, simple power tools

and a truck hoist, a two-storey house can be put together within a day.

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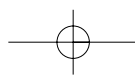
Because of the Taiwanese government's past mistakes in policy, the Thao's land was not incorporated as land reserved for aborigines. As a result, most of the land has been expropriated or cheated away by Han Chinese and the government, leaving the originals with no land to plant crops. The tribe is skilled at fishing, but is unable to compete with the developed marketing of the Chinese. Most of the members of the tribe now work as menial workers, cooks and vendors in the tourist industry at Sun Moon Lake.

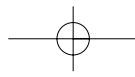
The elder system is not very marked in Thao society. Public affairs of the tribe, particularly rituals, are handled during tribal meetings and carried out by different clans and clan elders.

Community Layout Based Around Ritual Space

After Brawbaw was incorporated by the state in Taiwan, nearly all of the Thao tribe's ritual spaces (open areas for drying grain) were forcibly purchased by the government and given to public officials or Han Chinese. The tribe was forced to hold its rituals in the middle of roads.

Above
Building the village. Further encroachment of the concept of private property and commercialisation has completely undermined the original system of communal ownership of the tribe and separated the symbiotic links between its members.





While rituals are under way the tribe places two bamboo poles to signify the scope of the ritual area, and people and animals are forbidden from entering. While simple in appearance, the ritual space is very solemn and filled with taboos. This seriousness is not possible if the rituals take place on the road where cars and people are constantly passing through.

Community Consciousness Based on Collective Work

Members of the Thao tribe account for only 20 per cent of the population in Brawbaw. Moreover, through changes to land zoning laws the government has broken up the holdings of the tribe in the community. Further encroachment of the concept of private property and commercialisation has completely undermined the original system of communal ownership of the tribe and separated the symbiotic links between its members.

The earthquake led to the collective unemployment of the Thao tribe. Many tribe members were able to collect money from the government by carrying out reconstruction work, which also allowed them to rebuild a sense of a shared community through shared work. Rebuilding housing requires a great deal of coordinated labour, and links between members of the tribe were re-established through the process. This should serve as a future base for even closer relations among the tribe.

Wages account for about half the cost of constructing a building. If the government hopes that earthquake victims can construct their own houses to help alleviate the unemployment problem, then simple designs and construction methods must be devised to allow people not skilled in construction – including housewives and the elderly – to take part in the reconstruction efforts.

One such type of building is constructed out of a lightweight steel frame, with thin steel plates held together by easily installed screws thereby avoiding welding. The structure is easy to construct, safe, and can be taken apart and put up with a power screwdriver. Installation of windows, beds and showers is also simple. The roof of the structure is made of plywood, oilcloth and bamboo, which is virtually free for the picking in the mountains. Roofs and walls constructed from bamboo are easy to build and to replace if they rot. Bamboo roofs are constructed with two layers that allow air to flow in-between, dispersing heat from the hot sun beating down on the roof. Long eaves also provide shade, while screens keep out insects but still provide a clear view of the sky as well as ventilation to the house. Steel is another reusable resource, and the ease with which the buildings can be put up and taken down makes for straightforward reconstruction.

Aboriginal houses do not have separate bedrooms, but bamboo strips instead. Outer walls are constructed out of bamboo strips with an inner layer of aluminium insulation or cloth for heat insulation that also keeps out water and insects. 4

Above
Working from his camp in the Tehua Community, Hsieh has set up a simple factory where the modular elements of the buildings are made. Most of the complex design work has already been done, and components simply have to be bolted together. With Hsieh's modular elements, simple power tools and a truck hoist, a two-storey house can be put together within a day.

